



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,310	12/31/2003	David P. Aschenbeck	25320A	1792

22889 7590 09/29/2006

OWENS CORNING
2790 COLUMBUS ROAD
GRANVILLE, OH 43023

EXAMINER

KRUEER, KEVIN R

ART UNIT	PAPER NUMBER
----------	--------------

1773

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,310

Applicant(s)

ASCHENBECK ET AL.

Examiner

Kevin R. Krueer

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 and 19-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15-18 and 23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/17/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-13 and 19-22, drawn to a process of making a shingle, classified in class 427, subclass 186.
 - II. Claims 14-18 and 23, drawn to an antimicrobial shingle, classified in class 428, subclass 468.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product could be made by a materially different process. For example, the product could be made by a process wherein the shingle mat is not continuously supplied or a method in which the first portion of granules are included in the asphalt prior to its coating.

3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with James Dottavio a provisional election was made with traverse to prosecute the invention of Group II, claims 14-18 and 23 on July

Art Unit: 1773

19, 2006. Affirmation of this election must be made by applicant in replying to this Office action. Claims –13 and 19-22 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

6. The information disclosure statement filed June 14, 2004 has been fully considered. An initialed copy of said IDS is enclosed herein.

Drawings

7. The drawings filed 12/31/2003 are accepted.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 14-18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingram (US 3,084,059) in view of Kiik et al (6,585,813).

Ingram teaches an asphalt covered felt material (col 1, lines 20+) which has aggregate particles applied thereto. The size distribution of the particles is selected

Art Unit: 1773

such that less aggregate is needed to cover the asphalt covered felt. The reduction in aggregate leads to a reduction in price (col 6, lines 9+). The aggregate size is selected according to the formula detailed in column 3, line 32+-column 4, lines 9+. Specifically, the only particles that will be present in the upper layer of asphalt is the largest aggregates with the majority of the aggregate being encapsulated within the asphaltic composition. Said particles are herein understood to read on the "first portion of granules" herein claimed. The examiner notes said aggregates contain no anti-microorganism granules.

Ingram does not teach applying a second portion of aggregates that are anti-microorganism. However, Kiik teaches surface covering asphaltic roofing shingles (abstract) with anti-microbial copper or tin particles (abstract). Said particles are applied such that they may enter part-way into the asphalt (0035), but desirably remain on the surface so that they remain active. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the antimicrobial particles taught in Kiik to the surface of the roofing shingle taught in Ingram. The motivation for doing so would have been to improve the anti-microbial properties of the shingle. Furthermore, it would have been desirable that all of said anti-microbial particles remain on the surface of the shingle such that they were not enveloped. The motivation for doing so would have been so that the particles remain active.

With regards to claim 18, the examiner notes that said percentage of first portion of granules that are enveloped by the asphalt is a method limitation since said limitation does not limit in any way the percentage of granules that are enveloped in the final

Art Unit: 1773

product. Specifically, the claim allows for an additional portion of granules (not the "first portion" or "second portion") to be applied to the roofing shingle. Said additional portion could have any percentage of granules enveloped. In the final product, the skilled artisan could not distinguish between the first portion and additional portion of granules.

Additionally, the examiner notes that the 5 component aggregate blend taught in Ingram reads on said claimed range because 33% of said aggregates are category 5 aggregates that will be as large as the asphaltic layer is thick. The 4 component aggregate blend taught in Ingram is also herein understood to read on the claimed percentage because 40% of said aggregates will be category 4 aggregates, thus leaving at least 60% enveloped. The examiner also notes that some of the category 4 aggregates will be enveloped (based upon the aggregate size range and asphaltic layer thickness teachings), thus teaching a layer wherein "about 70%" of said aggregates are enveloped.

With regard to the particle size of claim 23, the examiner takes the position that the commercially available particles taught meet said limitation. Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the size of said particles in order to get the largest surface area per cost, while maintaining good adhesion and aesthetics.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

Art Unit: 1773

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kevin R. Kruer
Patent Examiner-Art Unit 1773